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PATENT & TRADEMARK OFFICE

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-65. (canceled).

66. (previously presented) An isolated or purified first polypeptide which binds to a second polypeptide comprising SEQ ID NO:4, said first polypeptide comprising amino acids 380 to 599 of SEQ ID NO: 2, wherein said amino acids 380 to 599 are at the carboxy terminus of said first polypeptide.

67-87. (canceled).

88. (previously presented) An isolated or purified polypeptide consisting of the amino acid sequence of SEQ ID NO: 2.

89-90. (canceled).

91. (previously presented) An isolated or purified polypeptide which binds a polypeptide comprising SEQ ID NO:4, wherein said isolated or purified polypeptide has RNA primase activity and wherein said isolated or purified polypeptide comprises an amino acid sequence selected from the group consisting of:

(a) a first amino acid sequence having at least 95% identity to amino acids 1-599 of SEQ ID NO: 2; and

(b) a second amino acid sequence comprising amino acids 1-599 of SEQ ID NO: 2.

92-104. (canceled).

105. (previously presented) An isolated or purified polypeptide comprising the amino acid sequence of SEQ ID NO: 2.

106. (previously presented) An isolated or purified fragment of *Staphylococcus aureus* DnaG primase set forth in SEQ ID NO: 2, wherein said fragment binds a polypeptide comprising SEQ ID NO:4, and wherein said fragment is selected from the group consisting of amino acids 229 to 599 of SEQ ID NO:2 and amino acids 380 to 599 of SEQ ID NO:2.

107-108. (canceled).

109. (previously presented) A method for determining whether a candidate compound is an inhibitor of the polypeptide set forth in SEQ ID NO:2, comprising:

(a) contacting a polypeptide of any one of claims 88, 105 and 106 with a candidate compound,

(b) assaying for RNA primase activity of the polypeptide of (a), and

(c) comparing the results from the assay of (b) with results of an assay performed using a polypeptide identical to the polypeptide of (a) that has not been contacted with the candidate compound, wherein when the RNA primase activity of the polypeptide of (a) is decreased in the presence of the candidate compound compared to in the absence of the candidate compound, the candidate compound is determined to be an inhibitor of the polypeptide set forth in SEQ ID NO:2.

110. (previously presented) A method for determining whether a candidate compound is an activator of the polypeptide set forth in SEQ ID NO:2, comprising:

(a) contacting a polypeptide of any one of claims 88, 105 and 106 with a candidate compound,

(b) assaying for RNA primase activity of the polypeptide of (a), and

(c) comparing the results from the assay of (b) with results of an assay performed using a polypeptide identical to the polypeptide of (a) that has not been contacted with the candidate compound, wherein when the RNA primase activity of the polypeptide of (a) is increased in the presence of the candidate compound compared to in the absence of the candidate compound, the candidate compound is determined to be an activator of the polypeptide set forth in SEQ ID NO:2.

111. (previously presented) A method for determining whether a candidate compound binds the polypeptide set forth in SEQ ID NO:2, comprising:

(a) contacting a polypeptide of any one of claims 88, 105 and 106 with a candidate compound, and

(b) detecting binding of said candidate compound to the polypeptide of (a).

112. (previously presented) A method for determining whether a candidate compound binds the polypeptide set forth in SEQ ID NO:2, comprising:

(a) contacting a cell expressing a polypeptide of any one of claims 88, 105 and 106 with a candidate compound, and

(b) detecting binding of said candidate compound to the polypeptide of (a).

113. (previously presented) The method of claim 111, further comprising measuring the ability of the candidate compound to increase or decrease the RNA primase activity of the polypeptide set forth in SEQ ID NO:2.

114. (previously presented) The method of claim 112, further comprising measuring the ability of the candidate compound to increase or decrease the RNA primase activity of the polypeptide set forth in SEQ ID NO:2.

115. (previously presented) The method of claim 111, wherein detection of said binding is performed by a technique selected from the group consisting of phage display, surface plasmon resonance, fluorescence resonance energy transfer, fluorescence polarization, scintillation proximity assay, biosensor assay, yeast two hybrid system, and affinity chromatography.

116. (previously presented) The method of claim 112, wherein detection of said binding is performed by a technique selected from the group consisting of phage display, surface plasmon resonance, fluorescence resonance energy transfer, fluorescence polarization, scintillation proximity assay, biosensor assay, yeast two hybrid system, and affinity chromatography.

117. (previously presented) The method of claim 109, wherein said candidate compound is selected from the group consisting of a small organic molecule, a peptide, a polypeptide and an antibody.

118. (previously presented) The method of claim 110, wherein said candidate compound is selected from the group consisting of a small organic molecule, a peptide, a polypeptide and an antibody.

119. (previously presented) The method of claim 111, wherein said candidate compound is selected from the group consisting of a small organic molecule, a peptide, a polypeptide and an antibody.

120. (previously presented) The method of claim 112, wherein said candidate compound is selected from the group consisting of a small organic molecule, a peptide, a polypeptide and an antibody.